

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[AZ-092-132; FRL-]

Approval and Promulgation of Implementation Plans for Arizona;
Maricopa County PM-10 Nonattainment Area; Serious Area Plan for
Attainment of the 24-Hour and Annual PM-10 Standards

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: On July 25, 2002, EPA approved under the Clean Air Act (CAA) the serious area particulate matter (PM-10) plan for the Maricopa County portion of the metropolitan Phoenix (Arizona) nonattainment area (Maricopa County area). Among other things, EPA approved the best available control measure (BACM) and most stringent measure (MSM) demonstrations in the plan and granted the State's request for an attainment date extension for the area. EPA's approval was challenged in the U.S. Court of Appeals for the Ninth Circuit. In response to the Court's remand, EPA has reassessed the BACM demonstration for the significant source categories of on-road motor vehicles and nonroad engines and equipment exhaust, specifically regarding whether or not California Air Resources Board (CARB) diesel is a BACM. EPA has also reassessed the MSM demonstration. As a result of these reassessments, EPA is again proposing to approve the BACM and MSM demonstrations in the plan and to grant the State's request to extend the attainment deadline from 2001 to 2006.

DATE: Any comments must arrive by [Insert date 30 days from the date of publication in the Federal Register].

ADDRESSES: Send comments to Carol Weisner, Planning Office (AIR-2), U.S. Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105-3901 or e-mail to weisner.carol@epa.gov, or submit comments at <http://www.regulations.gov>.

You can inspect copies of the submitted state implementation plan (SIP) revisions, EPA's technical support document (TSD), and public comments at our Region IX office during normal business hours by appointment.

FOR FURTHER INFORMATION CONTACT: Carol Weisner, EPA Region IX, (415)947-4107, weisner.carol@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document, "we," "us" and "our" refer to EPA.

I. Background

On July 25, 2002, EPA approved multiple documents submitted to EPA by Arizona for the Maricopa County area as meeting the CAA requirements for serious PM-10 nonattainment areas for the 24-hour and annual PM-10 national ambient air quality standards (NAAQS). Among these documents is the "Revised MAG 1999 Serious Area Particulate Plan for PM-10 for the Maricopa County Nonattainment Area," February 2000 (MAG plan) that includes the BACM demonstrations for all significant source categories (except

agriculture) for both the 24-hour and annual PM-10 standards and the State's request and supporting documentation, including the most stringent measure analysis (except for agriculture) for an attainment date extension for both standards. EPA's July 25, 2002 final action included approval of these elements of the MAG plan.¹

The Arizona Center for Law in the Public Interest (ACLPI), on behalf of Phoenix area residents, subsequently filed in the U.S. Court of Appeals for the Ninth Circuit a petition for review of EPA's approval of several elements in the MAG plan. As relevant to this proposed rule, ACLPI asserted that EPA's approval was arbitrary and capricious because the plan did not mandate the use of CARB diesel, a fuel standard adopted by CARB, and thus did not satisfy the CAA requirements for BACM and MSM for mobile sources. ACLPI further asserted that we granted an extension of the statutory deadline for attainment from December 31, 2001 to December 31, 2006 based on an inadequate MSM demonstration.

On May 10, 2004, the Court issued its opinion which upheld EPA's final approval in part,² but remanded to EPA the question

¹ For a detailed discussion of the MAG plan and the serious area PM-10 requirements, please see EPA's proposed and final approval actions at 65 FR 19964 (April 13, 2000), 66 FR 50252 (October 2, 2001) and 67 FR 48718 (July 25, 2002).

² The Court rejected the petitioners' claim that Arizona's general permit rule for agriculture did not constitute either

of whether CARB diesel must be included in the serious area plan as a BACM and a MSM. Specifically, with respect to whether CARB diesel was appropriately rejected as BACM, the Court stated that "...Arizona has offered one explanation, which EPA has declined to ratify, and EPA has not proffered an adequate explanation of its own." The Court further stated that "[i]n light of our disposition with respect to CARB diesel as a BACM, we remand to EPA for further consideration of whether CARB diesel satisfies MSM as well." Finally, the Court remanded the question of whether the Maricopa County area is eligible for an extension of the attainment date to 2006, but only insofar as that question depends on EPA's determination regarding CARB diesel as a MSM. *Vigil v. Leavitt*, 366 F.3d 1025, amended at 381 F. 3d 826 (9th Cir. 2004).

II. BACM Demonstration for the Maricopa County Nonattainment Area

A. EPA's 2002 Approval

Under CAA section 189(b)(2), serious area PM-10 plans must provide assurances that BACM will be implemented no later than four years after a moderate PM-10 nonattainment area is

BACM or MSM. The Court concluded that Arizona was not required to mandate implementation by farmers of all 34 identified best management practices to constitute BACM and that the mandate to implement one BMP in each of three categories was sufficient. Further, Arizona was not required to adopt practices implemented in California's South Coast region to satisfy the MSM requirement.

reclassified as serious. For the Maricopa County area, the BACM implementation deadline was June 10, 2000. In short, a BACM demonstration starts with the identification of all source categories contributing significantly to nonattainment of the PM-10 standards. Once the significant categories are identified, all potential BACM for these categories must be identified and a reasoned justification must be provided for any BACM that are not implemented. All BACM that are economically and technologically feasible must be implemented.³

In the case of the Maricopa County area, the MAG plan identifies eight significant PM-10 source categories, including on-road motor vehicle and nonroad engines and equipment exhaust.^{4, 5} A comprehensive list of potential BACM for

³ For a detailed discussion of EPA's preliminary interpretation of the CAA's BACM requirements, see "State Implementation Plans for Serious PM-10 Nonattainment Areas, and Attainment Date Waivers for PM-10 Nonattainment Areas Generally; Addendum to the General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990," 59 FR 41998, 42008-42014 (August 16, 1994)

⁴ "Nonroad vehicles" and "nonroad engines" are used interchangeably in EPA's proposed and final approval actions listed in footnote 1. In addition, CARB and other state air agencies typically refer to these sources as "off-road." "Nonroad engines and equipment," "nonroad vehicles," "nonroad engines," "nonroad" and "off-road" are used interchangeably in today's proposed rule.

⁵ A list of all potential BACM was compiled for each of the significant source categories and a detailed analysis of whether the potential BACM were technically and economically feasible was provided by the MAG plan and evaluated by EPA. 65 FR at 19964, 66 FR at 50252.

controlling both on-road and nonroad exhaust was compiled and EPA determined the list to be complete. In our 2002 approval of the MAG plan, we stated that Arizona had one of the most comprehensive programs for addressing on-road motor vehicle emissions and that the additional measures in the MAG plan (e.g., a more stringent diesel inspection and maintenance (I/M) program and measures both encouraging and requiring diesel fleet turnover) would strengthen and go beyond that program. For nonroad engines, EPA stated that Arizona had committed to adopt measures (e.g., a voluntary retirement program for gasoline powered lawn and garden equipment, a program to encourage use of temporary electrical power rather than portable generators at construction sites, a year-round Clean Burning Gasoline program, limits on the sulfur content of diesel fuels) that would strengthen the overall nonroad engine program making it go beyond the existing federal program. 65 FR at 19972-19974; 66 FR at 50258-50260. Strengthening and expanding existing programs are key criteria for demonstrating the implementation of BACM. 59 FR at 42013. EPA noted that CARB diesel was rejected in the MAG plan as a BACM due to high costs, but believed the cost analysis was too uncertain to judge. 65 FR at 19973; 67 FR at 48725. EPA concluded that, overall, the on-road and nonroad measures in the MAG plan constituted BACM for the Maricopa County area and that CARB diesel did not have to be included as a most stringent

measure (MSM) for the area because its implementation would not advance the attainment date. 67 FR at 48725.

B. Reassessment of the BACM Demonstration

Pursuant to the Ninth Circuit Court's directive, in this proposed rule EPA revisits the BACM demonstration in the MAG plan for the on-road motor vehicle and nonroad engines and equipment exhaust source categories and addresses the question of whether CARB diesel is a BACM for the Maricopa County area.

1) On-road Motor Vehicle Exhaust

Section 211(c)(4)(A) of the CAA generally prohibits the state from prescribing or attempting to enforce controls respecting motor vehicle fuel characteristics or components that EPA has controlled under section 211(c)(1),⁶ unless the state control is identical to the Federal control. Under section 211(c)(4)(C), EPA may approve a non-identical state fuel control as a SIP provision, if the state demonstrates that the measure is necessary to achieve the NAAQS. We may approve a state fuel requirement as necessary if no other measures would bring about timely attainment, or if other measures exist and are technically possible to implement but are unreasonable or impracticable.

EPA currently has nationwide regulations prescribing limits on various characteristics and components of motor vehicle diesel

⁶ This prohibition applies to all states except California, as explained in section 211(c)(4)(B).

fuel (e.g., sulfur content limits, minimum cetane index and limits on aromatic content) (55 FR 34120, August 21, 1990), thus, the state would need to obtain a CAA section 211(c)(4)(C) waiver in order to implement a different requirement governing characteristics and components of on-road diesel fuel, i.e., CARB diesel, in the Maricopa County area. However, Arizona has not requested a waiver for the Maricopa County area and, since EPA has approved the state's demonstration of attainment of the PM-10 NAAQS (67 FR 48718), EPA believes that the state would not be able to provide a demonstration that CARB diesel is necessary to achieve the NAAQS for PM-10. Thus, the State would not be able to obtain a section 211(c)(4)(C) waiver necessary to implement CARB diesel for on-road motor vehicles.

2) Nonroad Engines and Equipment Exhaust

Unlike on-road diesel fuel, nonroad diesel fuel currently used in engines and equipment is not subject to EPA standards; however, starting in 2007, fuel sulfur levels in nonroad diesel fuel will be limited to a maximum of 500 parts per million (ppm). This limit also covers fuels used in locomotive and marine applications (though not to the marine residual fuel used by very large engines on ocean-going vessels).⁷ Unlike motor vehicle

⁷ Starting in 2010, fuel sulfur levels in most nonroad diesel fuel will be reduced to 15 ppm. In the case of locomotive and marine diesel fuel, this second step will occur in 2012. See 69 FR 38958 (June 29, 2004).

fuel, EPA regulation of nonroad fuel does not trigger preemption of state fuel controls as the prohibition in section 211(c)(4)(A) does not extend to fuels used in nonroad engines and equipment. 69 FR 38958, 39072-39073 (June 29, 2004).⁸ EPA believes however that requiring CARB diesel only for nonroad engines and equipment in the Maricopa County area is not currently feasible as discussed below.⁹

a) Fuel Availability

Arizona currently has no refineries and, thus, does not produce CARB diesel; therefore, it must rely on refineries outside the state to supply the fuel. (MAG plan, Summary of Reasoned Justification for Nonimplementation of Particulate Control Measures Due to Infeasibility, pp. 29, 33) The Maricopa County area's fuel is supplied through pipelines from Los Angeles refineries and West Texas/New Mexico refineries. (Evaluation of Gasoline and Diesel Fuel Options for Maricopa County for State of Arizona Department of Environmental Quality, January 30, 1998,

⁸ Note that to the extent that nonroad fuel is available for use by both on-road motor vehicles and nonroad engines and equipment, it is preempted. *Id.*

⁹ In addition to soliciting information on the issues discussed in section II.B.2.a-c below, EPA is soliciting information on the economic feasibility of requiring CARB diesel for nonroad vehicles only. Given the issues discussed below and the reduced emissions reductions benefit of implementing CARB diesel for only nonroad vehicles, EPA expects the costs of implementing CARB diesel to be much higher than if it were implemented for both on-road and nonroad vehicles.

MathPro Inc., (MathPro Report), pp. v, vi and 10)

In 1997, it is estimated that the Maricopa County area used approximately 23,000 barrels/day (352.6 million gallons/year) of diesel fuel. Off-road diesel fuel consumption is approximately one third of on-road consumption, thus, off-road consumption is estimated at 88.2 million gallons/year. (MathPro Report, p. 17-18). In order to implement CARB diesel for nonroad vehicles, Arizona would need to ensure that the supplying refiners would be able to produce an adequate supply of CARB diesel for shipment to the Maricopa County area. This would depend on various factors including, among other things, whether refiners have adequate additional capacity beyond their current obligations to make CARB diesel. The most likely source of CARB diesel seems to be from Southern California refiners since they appear to be the only refineries currently producing CARB diesel with pipeline transporting capabilities to the Maricopa County area. However, information from CARB and the California Energy Commission (CEC) on the availability of CARB diesel is not conclusive.¹⁰ EPA

¹⁰ CARB reports that CARB diesel production by California refineries has increased more than 14% since 1998. (Cal EPA, ARB, STAFF REPORT: INITIAL STATEMENT OF REASONS FOR PROPOSED RULEMAKING, Proposed Regulatory Amendments Extending the California Standards for Motor Vehicle Diesel Fuel to Diesel Fuel Used in Harborcraft and Intrastate Locomotives, October 1, 2004.) CARB estimates that by 2007 nearly 231,000 barrels per day (or 3.5 billion gallons per year) of CARB diesel will be needed to meet California's demand. *Id.* CARB also reports that refineries will have the capacity to produce 275,000 barrels per day (or 4.22 billion gallons per year) by 2007. *Id.* CARB projects that

solicits any additional information that may provide a clearer understanding of the availability of CARB diesel for nonroad engines and equipment in the Maricopa County area.

b) Fuel Storage and Segregation

Increasing the number of fuels provided to a specific geographic area complicates and increases the demands on the fuels distribution system at various points. Distinct fuels need to be segregated to prevent contamination at each point in distributing fuels from a small number of suppliers (refiners) to

there will not be a shortage of CARB diesel for California and in fact there will be capacity for excess CARB diesel production in California. *Id.*

However, data from the CEC indicates that 2.8 billion gallons of CARB diesel were used by on-road vehicles in California in 2003. (February 2, 2005 MEMORANDUM, February 2, 2005 Phone Conversation with Chris Kavalec, California Energy Commission (CEC), on California's Supply and Demand for CARB Diesel.) CEC staff estimates that approximately 70% of total diesel usage in California is from on-road vehicles, thus, total CARB diesel usage in California for 2003 is estimated at 3.99 billion gallons. *Id.* CEC data also indicates that California refineries produced approximately 3.17 billion gallons in 2003. *Id.* Thus, in 2003, it appears that California's usage of CARB diesel exceeded what its refineries produced. *Id.* This shortage was likely made up by CARB diesel imports from other domestic and foreign sources. *Id.* If there is not a sufficient excess supply of CARB diesel, California refineries may need to make a substantial investment of time and resources for environmental permitting and construction in order to expand operations before being able to supply CARB diesel to the Maricopa County area. (MAG plan, Summary of Reasoned Justification for Nonimplementation of Particulate Control Measures Due to Infeasibility, p. 33 and December 6, 2004 MEMORANDUM, November 24, 2004 Phone Conversation with Gordon Shremp, CEC, on the availability of CARB diesel). EPA was unable to obtain any information on the availability of imports that could be supplied to the Maricopa County area.

a large number of users. If the Maricopa County area implements CARB diesel for nonroad engines and equipment, it would have to ensure that the fuel could be stored separately¹¹ from other fuels and its distribution could be segregated so that only nonroad engines and equipment would use it.

These uncertainties must be resolved before CARB diesel can be considered a feasible measure for the Maricopa County area. EPA solicits any additional information that may provide a better understanding of the fuel storage and segregation problems.

c) Fueling Outside the Maricopa County Area

The effectiveness of implementing CARB diesel in the Maricopa County area for nonroad engines and equipment is uncertain. Due to the size of the area and the additional cost of CARB diesel, there would be a significant incentive for owners and operators to fuel their nonroad equipment outside the area and/or move their base of operations outside the area whenever possible, thus greatly reducing the effectiveness of the measure. Owners and operators of nonroad engines and equipment using

¹¹ According to ADWM staff (10/25/04 **MEMORANDUM**, October 24, 2004 Telephone Conversation with Duane Yantorno, Air/Fuel Quality Manager, Arizona Department of Weights and Measures, Doris Lo, USEPA Region 9, Wienke Tax, USEPA Region 9 on Availability of CARB Diesel for the Maricopa County Nonattainment Area.), tank farms for fuel storage in the Maricopa County area are currently at maximum capacity. Thus, if some of the current diesel or gasoline tankage were to be converted to CARB diesel, there could be shortages of other fuels or new tankage might need to be built to accommodate storage of CARB diesel while keeping it segregated from other fuels, thus preventing contamination.

diesel fuel tend to be more sensitive to price increases and are more likely to go outside the area to avoid higher priced fuels than owners and operators of gasoline powered vehicles. This is because diesel powered equipment tends to be larger and use much more fuel than gasoline powered vehicles.¹² The MAG plan states that "California requires CARB diesel statewide. ...however, [in Arizona] CARB diesel would [apply solely to]...part of Maricopa County and 12 townships in two other counties. At its widest point, this area is approximately 66 miles across. The small size of the area means that diesel users will be able to fuel their vehicles outside the nonattainment area and reduce any potential effectiveness the measure would have." (MAG plan, Summary of Reasoned Justification for Nonimplementation of Particulate Control Measures Due to Infeasibility, p. 29) In addition, the American Trucking Associations, Inc. (ATA) states that "[t]he trucking industry is extremely competitive. ... Since fuel is one of the largest expenses for trucking companies, companies operating in the Maricopa nonattainment area would have a strong incentive to travel outside the nonattainment area to

¹² Diesel powered engines and equipment generally include items such as construction equipment (tractors, backhoes, pile drivers), agricultural equipment and heavy duty trucks. Gasoline powered engines and equipment generally include items such as cars, recreational vehicles and lawn and garden equipment. In addition, the diesel powered engines and equipment also are likely to be owned or operated in fleets where livelihood of the owner or operator's business will be sensitive to small increases in per gallon fuel costs.

avoid purchasing the more expensive CARB-diesel. ..." (ATA Amicus Curiae Brief, *Vigil v. Leavitt*, Case No. 02-72424; decided at 366 F.3d 1025, amended at 381 F. 3d 826 (9th Cir. 2004)).¹³ EPA agrees with these statements from the MAG plan and ATA; however, EPA solicits any additional information that may provide a better understanding of factors that may or may not cause owners and operators of nonroad engines and equipment to purchase diesel fuel outside the Maricopa County area.

III. MSM Demonstration and Extension of Attainment Date

As a serious PM-10 nonattainment area, the Maricopa County area was required to attain the annual and 24-hour PM-10 standards by no later than December 31, 2001. CAA section 188(c)(2). However, CAA section 188(e) allows us to extend the attainment date for a serious PM-10 nonattainment area for up to five years if attainment by 2001 is impracticable and certain specified additional conditions are met. Among these conditions is that the State must demonstrate to our satisfaction that its serious area plan includes the most stringent measures that are included in the implementation plan of any state and/or are achieved in practice in any state and are feasible for the area.¹⁴ Since, as discussed above, EPA is proposing to approve

¹³ While diesel trucks are not a nonroad source category, EPA believes the concerns of refueling outside the Maricopa County area raised by ATA are relevant to nonroad engines and equipment.

¹⁴ See footnote 1.

the BACM demonstration in the MAG plan for the on-road and nonroad vehicle exhaust source categories without CARB diesel, our determination for the Maricopa County area in our July 25, 2002 action that CARB diesel is also not required as a MSM because it does not advance the attainment date is not affected. Thus, the attainment date extension granted to the Maricopa County area in that action is also not affected.

IV. Proposed Action

EPA proposes to approve the BACM demonstration in the MAG plan for the source categories of on-road and nonroad vehicle exhaust without CARB diesel. CARB diesel is not feasible for on-road motor vehicles because Arizona cannot obtain a CAA section 211(c)(4)(C) waiver for purposes of PM-10 attainment. CARB diesel is not feasible for nonroad engines and equipment because of the uncertainties with fuel availability, storage and segregation and program effectiveness due to owners and operators fueling outside the Maricopa County area. Therefore, EPA also proposes to approve the MSM demonstration in the MAG plan and the associated extension of the attainment deadline for the area from December 31, 2001 to December 31, 2006.

V. Statutory and Executive Order Reviews

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this proposed action is not a "significant regulatory action" and therefore is not subject to review by the Office of Management

and Budget. For this reason, this action is also not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001). This proposed action merely proposes to approve state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law.

Accordingly, the Administrator certifies that this proposed rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule proposes to approve pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4).

This proposed rule also does not have tribal implications because it will not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes, as specified by Executive Order 13175 (65 FR 67249, November 9, 2000). This action also does not have Federalism implications because it does not have substantial direct effects on the States, on the relationship between the national

government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999). This action merely proposes to approve a state rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This proposed rule also is not subject to Executive Order 13045 "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. This proposed rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control,
Intergovernmental relations, Particulate matter, Reporting and
recordkeeping requirements.

AUTHORITY: 42 U.S.C. 7401 *et seq.*

June 22, 2005____
Dated

Laura Yoshi,
Acting Regional Administrator,
Region IX.